

Translation

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 2002P15077WO	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/DE2003/002983	International filing date (day/month/year) 11 September 2003 (11.09.2003)	Priority date (day/month/year) 12 September 2002 (12.09.2002)
International Patent Classification (IPC) or national classification and IPC H01Q 1/24		
Applicant SIEMENS AKTIENGESELLSCHAFT		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 7 sheets, including this cover sheet.

☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of _____ sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☒ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 11 March 2004 (11.03.2004)	Date of completion of this report 17 January 2005 (17.01.2005)
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/DE2003/002983

I. Basis of the report

1. With regard to the elements of the international application:*

- ☐ the international application as originally filed
- ☒ the description:
 pages 1-31, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____
- ☒ the claims:
 pages 1-34, as originally filed
 pages _____, as amended (together with any statement under Article 19
 pages _____, filed with the demand
 pages _____, filed with the letter of _____
- ☒ the drawings:
 pages 1/3-3/3, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____
- ☐ the sequence listing part of the description:
 pages _____, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

- These elements were available or furnished to this Authority in the following language _____ which is:
- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/fig _____

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

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III. Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

1. The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of:

☐ the entire international application.

☒ claims Nos. 4-9, 12-20

because:

☐ the said international application, or the said claims Nos. _____
relate to the following subject matter which does not require an international preliminary examination (*specify*):

☒ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. 4-9, 12-20
are so unclear that no meaningful opinion could be formed (*specify*):

See supplemental sheet

☐ the claims, or said claims Nos. _____ are so inadequately supported
by the description that no meaningful opinion could be formed.

☐ no international search report has been established for said claims Nos. _____.

2. A meaningful international preliminary examination cannot be carried out due to the failure of the nucleotide and/or amino acid sequence listing to comply with the standard provided for in Annex C of the Administrative Instructions:

☐ the written form has not been furnished or does not comply with the standard.

☐ the computer readable form has not been furnished or does not comply with the standard.

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Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: III.1.

No opinion has been established as to novelty, inventive step and industrial applicability with claims 4-9 and 12-20 because the dependencies of these claims are unclear - cf. "according to one of the claims 1 with 3,...".

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V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	3, 21-23, 25-29, 31, 32	YES
	Claims	1, 2, 10, 11, 24, 30, 33, 34	NO
Inventive step (IS)	Claims	21-23, 25-29, 31	YES
	Claims	1-3, 10, 11, 24, 30, 32-34	NO
Industrial applicability (IA)	Claims	1-3, 10, 11, 21-34	YES
	Claims		NO

2. Citations and explanations

1. Introductory remarks

1.1 Claims 1, 2 and 3 do not meet the requirements of PCT Article 6 because the subject matter for which protection is sought is not clearly defined. The claims attempt to define the subject by the result to be achieved; this however only states the problem to be solved. To remedy this defect it appears necessary to include in the claims the technical features required for attaining this result.

1.2 Claim 21 appears to be dependent on claim 3.

1.3 The application for protection in claim 27 is unclear because too many "and/or" combinations are claimed.

1.4 In claim 28 "dielectric material" appears inconsistent with "magnetically conductive material".

1.5 As explained below, some of the features in device claim 31 relate to a method of fabricating the

device and not to the definition of the device in terms of its technical features - cf. "produced using cutting and bending techniques". Hence, contrary to PCT Article 6, the intended delimitations do not follow clearly from the claim.

2. This report refers to the following document:
D1: US-B-6 246 3741 (PERROTA ALESSANDRO ET AL.) 12
June 2001 (2001-06-12)
3. Regardless of the above-mentioned lack of clarity, the subject matter of claim 1 is not novel within the meaning of PCT Article 33(2).
- 3.1 D1 is considered the prior art closest to the subject matter of claim 1. It discloses (the references in parentheses relate to this document): a radio communication device (10) of reduced SAR with at least one printed-circuit board (30, 36) and with at least one antenna (16) coupled thereto for radiating and/or receiving electromagnetic wireless radiation fields, at least one first additional current-conducting correction element (18) for SAR reduction being coupled to the printed-circuit board (30, 36) and designed in such a way that the amplitude level and/or phase position of electrical currents on the antenna (16), the printed-circuit board (30, 36) and the correction element (18) are mutually adjusted so that the maximum of the SAR distribution resulting from these currents altogether is minimized in the body tissue of a user in carrying the radio communication device or in activating the radio communication device for speaking and/or listening in the head region of said user.

The subject matter of claim 1 is therefore not novel in relation to document D1 (PCT Article 33(2)).

3.2 Dependent claims 2, 3, 10, 11, 24, 30, 32-34 do not contain any features which in combination with the features of any claim to which they refer back meet the PCT requirements for novelty and inventive step because

- these features are mentioned in D1 (claims 2, 10, 11, 24, 30, 33, 34) or
- these features are regarded as obvious (claims 3, 32).

4. Dependent claims 21-23, 25-29 and 31 contain features which in combination with the features of a claim to which they refer back appear to meet the PCT requirements of novelty and inventive step.

5. Contrary to PCT Rule 5.1(a)(ii), the description does not indicate the relevant prior art disclosed in D1, nor does it cite this document.
